New Mexico
ENVIRONMENT DEPARTMENT
Air Quality Bureau
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DEPUTY SECRETARY

NEW SOURCE REVIEW PERMIT
Issued under 20.2.72 NMAC

Certified Mail No: 7003 2260 0007 2304 8037
Return Receipt Requested

NSR Permit No:	0298M6R1
Facility Name:	Chino Mine
Permittee Name:	Freeport-McMoRan Chino Mines Co
Mailing Address:	PO Box 10, Bayard, NM 88023
TEMPO/IDEA ID No:	526 - PRN20130002
AIRS No:	350170001
Permitting Action:	Technical Revision
Source Classification:	Major – Title V and PSD Major
Facility Location:	32°41'55.6" N and 108°7'29.9" W
County	Grant
Air Quality Bureau Contact	Joseph Kimbrell
Main AQB Phone No.	(505) 476-4300

Richard L. Goodyear

Richard L. Goodyear, PE
Bureau Chief
Air Quality Bureau

APR 1 2013
Date

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April 1, 2013

Richard L. Goodyear, PE
Bureau Chief
Air Quality Bureau

Date

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. This permit NSR 0298M6R1 supersedes all portions of Air Quality Permits 0298M6 issued on 9/14/12 (Chino Mine), except the portion requiring compliance tests. Compliance test conditions from previous permits, if not completed, are still in effect, in addition to compliance test requirements contained in this permit.

B. This permit is not effective until the Department receives the permit fee of $1,415.00 as specified on the attached invoice. Please note that this permit fee is due regardless of the intended use or non-use of the permit or cancellation of the permit by the applicant or Department.

A101 Permit Duration (expiration)

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

A. The Chino Mine is located near Bayard, New Mexico, within Grant County. The mine produces copper cathode using the Solvent Extraction - Electro-winning

(SX/EW) process in the SX/EW Plant and produces copper concentrate using a wet flotation process in the Ivanhoe Concentrator. Mine operations associated with the Santa Rita Pit consist of blasting, loading, hauling, placement of waste rock and leach rock on stockpiles, and transport of concentrator ore to the Primary Crusher. Concentrate slurry from the Ivanhoe Concentrator travels approximately seven miles by pipeline to the Filter and Blending Plants near Hurley, New Mexico where the slurry is dewatered and loaded into rail cars for transport to off-site smelters for further processing. Ancillary operations at Chino include a portable screening plant operated in the pit area and operation of the Chino Power Plant near Hurley. The Chino Power Plant produces electric power on an as-needed basis from one (1) Westinghouse natural gas-fired turbine and one (1) Nooter/Ericksen natural gas-fired Heat Recovery Steam Generator (HRSG) duct burner. The Cobre Mine is located approximately two miles north of the Chino Mine. The Cobre Mine property is contiguous and adjacent to the Chino Mine property. The primary activity at Cobre is a contractor owned and operated screening plant and the loading of magnetite into over-the-road trucks and rail cars for transport to customers off-site. There are also two (2) diesel-fired emergency generators at Cobre for use during unplanned power outages and a tailings impoundment from past operations at this site.

B. This facility is located at UTM Zone 12, UTM Easting 773,115 km, UTM Northing 3,631,614 km, approximately 2.2 miles northeast of Bayard, New Mexico in Grant County.

C. This technical revision consists of: This description is for informational purposes only and is not enforceable.

1. Revise Permit Condition A302 A. to:
   - Increase the hourly throughput limit of the Cobre Mine Screening Plant (Unit CB SCRN) from 300 tons per hour to 450 tons per hour and increase the annual throughput limit from 700,000 tons per year to 1,346,800 tons per year.
2. Revise Permit Condition A108 C. to:
   - Increase the daily throughput limit of the Cobre Mine Material Handling of Magnetite (Unit CBM MH) from 2,700 tons per day to 4,500 tons per day and increase the annual throughput limit from 600,000 tons per year to 1,346,800 tons per year.
3. The Department also reviewed and completed an evaluation of the NOE application to construct and operate the reagent mixing facility (Unit SIPX). The results demonstrate that the emissions from the units are too low to trigger 20.2.72 NMAC - Construction Permits or 20.2.73 - Notice of Intent and Emissions Inventory Requirements and the unit qualify for exemption under NMAC 20.2.72.202.B(5). Therefore, you are authorized to construct and operate the reagent mixing facility (Unit SIPX) as stated in the application. This unit shall be included in future full NSR and Title V applications.

D. Table 102.A and Table 102.B show the total potential emissions from this facility for information only, not an enforceable condition, excluding exempt sources or activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx) (non-fugitives of 209.2)	345.2
Carbon Monoxide (CO) (non-fugitives of 101.3)	1301.7
Volatile Organic Compounds (VOC)* (non-fugitives of 16.7)	18.9
Sulfur Dioxide (SO_2) (non-fugitives of 3.7)	55.7
Total Suspended Particulates (TSP) (non-fugitives of 34.4)	8208.9
Particulate Matter less than 10 microns (PM_{10}) (non-fugitives of 31.7)	2082.5
Particulate Matter less than 2.5 microns ($PM_{2.5}$) (non-fugitives of 24.4)	234.8

Table 102.B: Total Potential HAPS that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)
Total HAPs**	3.7

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations

A. The Permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.3 NMAC Ambient Air Quality Standards	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.33 NMAC Gas Burning Equipment - Nitrogen Dioxide	X	SX/EW Boilers, Combustion Turbine, HRSG
20.2.61 NMAC Smoke and Visible Emissions	X	Cobre Emergency Generators, SX/EW Boilers, Combustion Turbine, HRSG
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility

Applicable Requirements	Federally Enforceable	Unit No.
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
20.2.77 NMAC New Source Performance Standards	X	F-2-1-1.4 (Combustion Turbine - GG); F-2-1-1.5 (HRSG - Dc);, Concentrator (LL); CB SCRN ENG, CH SCRN ENG (IIII)
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	Gasoline Dispensing Facilities (CCCCCC) Cobre Emergency Generators and CB SCRN ENG & CH SCRN ENG (ZZZZ)
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	Entire Facility
40 CFR 60.40c, Subpart Dc, Subpart Dc, Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units	X	F-2-1-1.5 (HRSG)
40 CFR 60.330, Subpart GG, Standards of Performance for Stationary Gas Turbines	X	F-2-1-1.4 (Combustion Turbine)
40 CFR 60.380, Subpart LL, Standards of Performance for Metallic Mineral Processing Plants	X	PC-01, CV-01A, CTS-01, CV-01C, SAG-F1, IC-01
NSPS 40 CFR 60.40, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants	X	Entire Facility
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	X	CB SCRN ENG, CH SCRN ENG (Screening Plant Engine)
40 CFR 63, Subpart A, General Provisions	X	Entire Facility
40 CFR 63, Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	X	All GDFs
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	X	Cobre Emergency Generator Sets, CB SCRN ENG, CH SCRN ENG (Screening Plant Engine)
40 CFR 82, Subpart F, Protection of Stratospheric Ozone, Service, Maintenance and Repair of Air Conditioners	X	Entire Facility

A104 Facility: Regulated Sources

A. Table 104 lists all of the emission units authorized for this facility. Emission units that were identified as exempt activities and/or equipment (as defined in 20.2.72.202 NMAC) not regulated pursuant to the Act are not included.

Table 104: Regulated Sources List

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
CB EGEN2	Cobre Mine Generator Set #2	Caterpillar, D399 PCTA	36Z01236	1300 HP, Diesel Engine	N/R
CB EGEN3	Cobre Mine Generator Set #3	Caterpillar, D399 PCTA	36Z01234	1300 HP, Diesel Engine	N/R
CB TLNGS	Cobre Mine Tailings Impoundment	N/A	N/A	N/A	N/R
CBM HR	Cobre Mine Hauling	N/A	N/A	N/A	N/R
CBM MH	Cobre Mine Material Handling	N/A	N/A	N/A	N/R
CM BLST	Chino Mine Blasting	N/A	N/A	N/A	N/R
CM HR	Chino Mine Hauling	N/R	N/R	N/R	N/R
CM MH	Chino Mine Material Handling	N/A	N/A	N/A	N/R
CM TLNGS	Chino Mine Tailings Impoundment	N/A	N/A	N/A	N/R
CTS-01	Conveyor Transfer (beneath PC-01)	NA	NA	NA	N/R
CV-01A	Coarse Ore Stockpile Conveyor, Flight #1	NA	NA	NA	6/13/1981
CV-01B	Coarse Ore Stockpile Conveyor, Flight #1	N/R	N/R	N/R	N/R
CV-01C	Coarse Ore Conveyer Transfer (between CV-01A and CV-01B)	unknown	unknown	unknown	N/R
F-1-3-2	Material Handling, Front End Loader	unknown	unknown	unknown	N/R
F-2-1-1.4	Westinghouse Gas Turbine	Westinghouse, W251B12	4658139	455 MMBtu.hr	1/1/2000

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
F-2-1-1.5	Heat Recovery Steam Generator	HRSG w/duct burner	N/R	48.8 MMBtu.hr	1/1/2000
F-2-2-1	Cooling Tower	Marley, 576-46-3	12-519-71	15000 gpm	1/1/1971
FLTR/BLND	Filer/Blending Plant	N/A	N/A	N/A	N/R
IC-01	Molybdenum Plant	Molybdenum Plant			8/13/2001
LHS-01 (IC-06)	Lime Handling System	Lime Handling System - Ivanhoe Concentrator			6/6/1980
LUS-01	Lime Unloading System	Lime Unloading System - Ivanhoe Concentrator			6/13/1981
PC DUMP	Primary Crusher Dump Pocket	unknown	unknown	unknown	N/R
PC-01	Primary Crusher	Primary Crusher			6/13/1981
SAG-F1 (IC-04)	SAG Mill Feeders	Concentrate Handling	N/A	N/A	6/13/1981
SCDP	Stacker Conveyor	N/R	N/R	N/R	N/R
CH SCRN	Screening Material Handling	PORTEC Kolberg	unknown	1,000 TPH	1/1/2007
CB SCRN	Screening Material Handling	Chieftain 2100X, Powerscreen – A Terex Company	PID00124TDGC34711-2012	450TPH	3/2/2012
CH SCRN ENG	Screening Plant Diesel Engine	Deutz, BF4M2012	N/A	96.5 HP	8/2006
CB SCRN ENG	Screening Plant Diesel Engine	Caterpillar C4.4 ATAAC-4 cylinder	BPKXL04.4NM1	111HP	2/2012
SXEW 10MST	SX/EW Plant Ten Mixer/settler Tanks	Mixer/Settler Tank		6-39,000 sqft & 4-39,400 sqft (±10%)	8/15/2000
SXEW Boiler No.1	SXEW Plant Water Boiler No.1	Lochinvar CBL1257	N/A	1.255 MMBtu/hr	TBD
SXEW Boiler No.2	SXEW Plant Water Boiler No.2	Lochinvar CBL1257	N/A	1.255 MMBtu/hr	TBD
SXEW RT	SX/EW Plant Raffinate Tank	SX/EW Plant Raffinate Tank		5,024 sqft (±10%)	8/15/2000
SXEW SAT	SXEW Plant Acid Tankhouse	N/A	N/A	N/A	N/R

Unit No.	Source Description	Make Model	Serial No.	Capacity	Manufacture Date
GDF	Gasoline Dispensing Facilities	N/A	N/A	Each tank is <10,000 gal/yr	N/R

A105 Facility: Control Equipment

A. Table 105 lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

Table 105: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s)[1]
MP SCRB	Moly Plant Wet Scrubber	TSP/PM/PM_{10}/$PM_{2.5}$	IC-01
PCB H-01	Primary Crusher Baghouse	TSP/PM/PM_{10}/$PM_{2.5}$	PC-01
CSLU-01	Lime Unloading System Wet Scrubber	TSP/PM/PM_{10}/$PM_{2.5}$	LUS-01
CSLH-01	Lime Handling System Wet Scrubber	TSP/PM/PM_{10}/$PM_{2.5}$	LHS-01
RCB-01	Recycle Crusher Baghouse (no emissions to atmosphere; vents back into building)	TSP/PM/PM_{10}/$PM_{2.5}$	Recycle Crusher

1 Control for unit number refers to a unit number from the Regulated Equipment List

B. Wet Scrubber

Requirement: Units IC-01, LUS-01, and LHS-01 shall be controlled by the wet scrubbers.
Monitoring Except for periods of monitoring system breakdowns, repairs, maintenance, and calibration checks, Permittee shall continuously monitor: (1) the differential pressure (inches of water) across the wet scrubbers via a differential pressure gauge; and (2) the water flow rate (gallons per minute) into the scrubber via a flow meter while the associated process equipment is operating. Monitoring devices shall be maintained in good operating condition.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

C. Baghouse

Requirement: Units PC-01 and Recycle Crusher shall be controlled by the baghouses.
Monitoring: Except for periods of monitoring system breakdowns, repairs, maintenance, and calibration checks, Permittee shall continuously monitor the differential pressure (inches of water) across the baghouses with a differential pressure gauge while the associated process equipment is operating. Monitoring devices shall be maintained in good operating condition.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

A106 Facility: Allowable Emissions

A. The following table(s) list the emission units and their allowable emission limits. (See applicable requirements in Table 103.A).

Table 106.A: Allowable Emissions

Unit No.	NO_x (pph)	[1]NO_x (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO_2 (pph)	SO_2 (tpy)	TSP (pph)	TSP (tpy)	PM_{10} (pph)	PM_{10} (tpy)	$PM_{2.5}$ (pph)	$PM_{2.5}$ (tpy)
CB EGEN2	32.2	8.1	8.6	2.1	<	<	<	<	<	<	<	<	<	<
CB EGEN3	32.2	8.1	8.6	2.1	<	<	<	<	<	<	<	<	<	<
CB TLNGS									<	1.2	<	<	<	<
CBM HR									21.0	25.1	5.1	6.2	<	<
CBM MH									<	<	<	<	<	<
CM BLST	523.0	136.0	4617.0	1200.4			200.0	52.0						
CM HR									2219.0	7935.1	542.5	1940.1	54.3	194.0
CM MH									1.2	5.4	<	2.0	<	<
CM TLNGS									40.3	176.3	20.1	88.2	3.0	13.2
CV-01C									1.5	4.9	<	1.8	<	<
F-2-1-1.4	39.9	174.8	20.0	87.6	2.8	12.3	<	1.8	2.3	10.1	2.3	10.1	2.3	10.1
F-2-1-1.5	2.4	10.5	1.3	5.7	<	2.6	<	<	<	1.3	<	1.3	<	1.3
F-2-2-1									2.2	9.7	1.6	7.1	<	<
FLTR/BLND [4]									<	<	<	<	<	<
GDF					<	<								
IC-01									<	1.4	<	1.4	<	1.4
LHS-01 (IC-06)									<	<	<	<	<	<
LUS-01									<	<	<	<	<	<
PC DUMP									<	<	<	<	<	<
PC-01 [3]									2.2	9.5	2.2	9.5	2.2	9.5
SAG-F1 (IC-04)									1.5	4.9	<	1.8	<	<
SCDP [2]									<	1.6	<	<	<	<
CH SCRN									19.8	13.9	8.6	6.1	1.2	<
CB SCRN									3.7	5.2	1.5	2.3	<	<
CB SCRN ENG	1.2	2.5	1.0	2.2	0.5	1.1	0.4	0.9	0.5	1.0	0.5	1.0	0.5	1.0
CH SCRN ENG	1.0	3.6	0.1	0.5	0.02	0.1	0.2	1.0	0.2	1.0	0.2	1.0	0.2	1.0
SXEW 10MST					<	1.3								
SXEW Boiler No.1	<	0.9	<	0.5	<	<	<	<	<	<	<	<	<	<
SXEW Boiler No.2	<	0.9	<	0.5	<	<	<	<	<	<	<	<	<	<

Unit No.	NO_x (pph)	[1]NO_x (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO_2 (pph)	SO_2 (tpy)	TSP (pph)	TSP (tpy)	PM_{10} (pph)	PM_{10} (tpy)	$PM_{2.5}$ (pph)	$PM_{2.5}$ (tpy)
SXEW RT					<	<								
SXEW SAT											<	<		
TOTAL - Non-fugitive sources		**209.2**		**101.3**		**16.7**		**3.7**		**34.4**		**31.7**		**24.4**
TOTAL*- Fugitive & Non-fugitive sources		345.2		1301.7		18.9		55.7		8208.9		2082.5		234.8

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2.
2 Unit SCDP includes emissions from CV-01A Flight 1 and CV-01B Flight B.
3 Unit PC-01 includes emissions from CTS-01.
4 Unit FLTR/BLND includes emissions from Units CV-01-53, CV-02-53, CV-03, CV-04, CV-05, CV-06, and F-1-3-2
5 "-" indicates the application represented emissions of this pollutant are not expected.
6 "<" indicates the application represented uncontrolled emissions are less than 1.0 pph or 1.0 tpy for this pollutant. Allowable limits are not imposed on this level of emissions, except for flares and pollutants with controls.
7 Totals are for information only and are not enforceable conditions.

Table 106.B: Performance Standards for Ivanhoe Concentrator Equipment

Unit	Grain Loading	Opacity
Molybdenum Plant (electric heat, w/ wet scrubber)	0.02 g/dscf	NA
PCB H-01 (Primary crusher baghouse)	0.02 g/dscf	7%
(CTS-01) Conveyer Transfer systems	NA	10%
SAG-F1 Mill Feeders	NA	10%

B. NOx emissions from the turbine (Unit F-2-1-1.4) shall not exceed 184 ppmv at 15 percent oxygen on a dry basis. (40 CFR 60.332)

C. SO_2 emissions from the turbine (Unit F-2-1-1.4) shall not exceed 0.015 percent by volume at 15 percent oxygen on a dry basis, or shall not burn fuel which contains sulfur in excess of 0.8 percent by weight (8000 ppmw). (40 CFR 60.333)

A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)

A. Allowable SSM emission limits are not imposed at this time. The Permittee shall maintain records in accordance with Condition B109.C, except the requirement to record the start and end times of SSM and Malfunction events shall not apply. SSM emissions have been incorporated into the steady-state emissions limits in Table 106.A.

A108 Facility: Allowable Operations

A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting requirements are required to demonstrate compliance with continuous hours of operation unless otherwise stated in this permit.

B. Operating Hours for Units CB EGEN2, CB EGEN3, CH SCRN ENG and CB SCRN ENG

Requirement: The emission limits for these units were based on reduced hours of operation, CB EGEN2 500 hours per year, CB EGEN3 500 hours per year, CH SCRN ENG 7,000 hours per year, and CB SCRN ENG 4380 hours per year. To demonstrate compliance with the allowable emission limits, the Permittee shall restrict the operating hours for these units to the above listed hours.
Monitoring: The Permittee shall monitor the operating hours of each engine. For engines without a non-resettable hour meter, the monitoring data shall include the date, start time, and end time of each operating period. For engines equipped with a non-resettable hour meter, the monitoring data shall be the cumulative run time of the engine.
Recordkeeping: The Permittee shall record the meter reading for each unit starting January 1 and within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total operating hours for each engine above. During the first 12 months of monitoring, the permittee shall calculate a monthly running total of operating hours of reach engine. After the first 12 months of monitoring, the Permittee shall then calculate the month- rolling 12-month total operating hours for each engine.
Reporting: The Permittee shall report in accordance with Section B110.

C. Cobre Mine Throughput: - Magnetite Production Limits (Unit CBM MH)

Requirement: The total material handling of magnetite at the Cobre Mine shall not exceed 4,500 tons per day and 1,346,800 $^{tons}/_{yr}$. This operation is authorized to operate 24-hours per day. This production rate was specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor the daily process rate of the Cobre Mine while the process is in operation.
Recordkeeping: The Permittee shall produce production records upon request. The records can be computer generated or hand written summaries supported by the data. When requested, the Permittee shall produce a record that includes the date and: • a record of the daily production rate, • during the first 12 months of monitoring, the permittee shall calculate a monthly running total of production rate, • after the first 12 months of monitoring, a record of the monthly rolling 12-month total production rate.
Reporting: The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request. The Permittee shall report in accordance with Section B110.

D. Chino Mine Throughput: - Copper Ore Production Limits (Unit CM MH)

Requirement: The production rate of material mined from the Santa Rita Pit and delivered to Stockpiles shall not exceed the limits shown in Table 108.D below. This operation is authorized to operate 24-hours per day. This production rate was specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor the amount of material mined from the Santa Rita Pit and delivered to each Stockpile daily.
Recordkeeping: The Permittee shall maintain the ability to produce production records upon request. The records can be computer generated or hand written summaries supported by the data. When requested, the Permittee shall produce a record that includes the emission activity name, date, and: • a record of the daily production rate, • during the first 12 months of monitoring, the permittee shall calculate a monthly running total of production rate, • after the first 12 months of monitoring, a record of the monthly rolling 12-month total production rate.
Reporting: The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request. The Permittee shall report in accordance with Section B110.

Table 108.D, Maximum Mine Material Throughput (1)

Emissions Activity	tons/day	tons/yr
Material Handling - Santa Rita Pit	350,000	127,750,000
Unloading - Lampbright Leach Stockpile	250,000	91,250,000
Unloading - South Waste + South Leach Stockpiles	250,000	91,250,000
Unloading - West Waste Stockpile[2]	80,000	30,000,000

(1) The mine plan is constantly in flux, and the forecast tonnages can change month to month.
(2) Limits were reduced so TSP modeling would meet AAQS for NSR Permit 0298M6.

A109 Facility: Reporting Schedules

A. For Title V Program: A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on July 1st and January 1st of each year.

B. For Title V Program: The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on July 1st of each year.

A110 Facility: Fuel Sulfur Requirements

A. Facility Wide

Requirement: The Turbine, Unit F-2-1-1.4 and HRSG, Unit F-2-1-1.5, shall combust only pipeline quality natural gas as defined in this permit. The SXEW Boilers No. 1 and 2 shall combust only propane. The generators (Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG) shall combust only low sulfur diesel fuel. The sulfur content of the fuel oil shall not exceed 0.05% sulfur by weight.
Monitoring: None
Recordkeeping: The Permittee shall demonstrate compliance with the natural gas or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract, or vendor certification for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel. If fuel gas analysis is used, the analysis shall not be older than one year.
Reporting: The Permittee shall report in accordance with Section B110.

A111 Facility: 20.2.61 NMAC Opacity

A. For Units SXEW Boilers 1 & 2, F-2-1-1.4 and F-2-1-1.5

Requirement: Units shall only combust pipeline quality natural gas or natural gas liquids and emissions from the combustion units shall not exceed 20% opacity.
Monitoring: Use of natural gas or natural gas liquids constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during steady state operation, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Method 9 as required by 20.2.61.114 NMAC
Recordkeeping: The Permittee shall record dates of any opacity measures and the corresponding opacity readings.
Reporting: The Permittee shall report in accordance with Section B110.

B. For Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG

Requirement: Emission from combustion units shall not exceed 20% opacity. Units CB EGEN2, CB EGEN3, CB SCRN ENG and CH SCRN ENG shall be fueled only with diesel.
Monitoring: Once per calendar quarter, an opacity measurement shall be performed on each Unit for a minimum of 10 minutes in accordance with the procedures of 40 CFR 60, Appendix A, Method 9.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109 of each unit, any visible emission events during steady state operations (date, time, and the corresponding opacity measurements) and the quarterly corresponding opacity measurements. For units burning diesel fuel, certification of grade and characteristics as stated in permit application for fuel used

during the period shall be recorded and maintained. The record shall note if an opacity measurement was not conducted because the engine did not operate during that calendar quarter.
Reporting: The Permittee shall report in accordance with Section B110.

A112 Facility: Haul Roads

A. Haul Roads Cobre Mine (Unit CBM HR)

Requirement: Fugitive emissions from vehicles traveling on haul roads at the Cobre Mine shall not exceed 25.1 tons per year TSP and 6.2 tons per year PM_{10} on a monthly –rolling 12-month basis. Emissions will be calculated using vehicle miles travelled and emission factors from AP-42. This operation is authorized to operate 24-hours per day. The TSP and PM_{10} potential to emit values were specified in the permit application and is the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor vehicle miles travelled on Cobre Mine haul roads for haul trucks and over-the-road trucks. • Within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total vehicle miles travelled. • During the first 12 months of monitoring, the permittee shall calculate a monthly running total of fugitive emissions of TSP and PM10. • After the first 12 months of monitoring the Permittee shall then calculate the monthly-rolling 12-month total fugitive emissions of TSP and PM_{10}.
Recordkeeping: The Permittee shall keep monthly records of the total vehicle miles travelled by haul trucks and over-the-road trucks on Cobre Mine haul roads and the calculated fugitives.
Reporting: The Permittee shall report in accordance with Section B110.

B. Haul Roads Chino Mine (Unit CM HR)

Requirement: Fugitive emissions of TSP, PM10, and PM2.5 from vehicles travelling on haul roads at the Chino Mine shall not exceed the limits established in Table 106.A on a monthly-rolling 12-month basis. Emissions will be calculated using vehicle miles travelled and emission factors from AP-42. This operation is authorized to operate 24-hours per day. The TSP, PM_{10}, and $PM_{2.5}$ potential to emit values were specified in the permit application and are the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor vehicle miles travelled on Chino Mine haul roads. • Within the first 15 days of each calendar month, the Permittee shall calculate the prior month's total vehicle miles travelled by haul trucks and estimate the total vehicle miles travelled by other vehicles (i.e. passenger/maintenance/delivery) travelling on haul roads. • During the first 12 months of monitoring, the permittee shall calculate a monthly running total of fugitive emissions of TSP and PM_{10}. • After the first 12 months of monitoring, the Permittee shall then calculate the monthly-rolling 12-month total fugitive emissions of TSP, PM_{10}, and $PM_{2.5}$.

Recordkeeping: The Permittee shall keep monthly records of the total vehicle miles travelled by haul trucks and other vehicles (i.e. passenger/maintenance/delivery) travelling on haul roads and the calculated Fugitive emissions.
Reporting: The Permittee shall report in accordance with Section B110.

C. Haul Road Control throughout Cobre and Chino Mines

Requirement: Truck traffic areas and haul roads at the Cobre Mine and Chino Mine shall be watered **and** treated by application of base course or other equally effective measures to control particulate emissions. This condition demonstrates compliance with the 80% control efficiency for haul road emissions used in the permit application and modeling. The Permittee shall obtain NMED approval of any "equally effective measures to control particulate emissions". Control measures shall be implemented when visible emissions are observed at the height of standard haul truck headlights. These control measures shall be used on unpaved roads as far as the nearest public road.
Monitoring: The Permittee shall conduct daily monitoring of truck traffic areas and haul roads for the presence of adequate moisture, base course, and/or other measures to minimize fugitive particulate emissions. Daily monitoring and application of control measures are not required for areas covered by snow or ice, or if precipitation has occurred that is sufficient to control particulate emissions.
Recordkeeping: The Permittee shall keep daily records of the monitoring inspections and will document the location(s) of water application or equivalent control measures, if such measures are required to control fugitive particulate emissions. The records shall indicate if the daily inspection revealed no areas requiring additional control measures.
Reporting: The Permittee shall report in accordance with Section B110.

A113 Facility: 40 CFR 82, Subpart F

A. Protection of Stratospheric Ozone, Service, Maintenance and Repair of Air Conditioners

Requirement: The facility operates and maintains air conditioning systems and is subject to the Subpart F standards for recycling and emissions reductions during maintenance, service, repair, or disposal of appliances.
Monitoring: The Permittee shall comply with the applicable monitoring requirements of 40 CFR 82, Subpart F.
Recordkeeping: The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 82, Subpart F.
Reporting: The Permittee shall comply with the applicable reporting requirements of 40 CFR 82, Subpart F.

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry (not required)

A. This section has common equipment related to most Oil and Gas Operations.

CONSTRUCTION INDUSTRY

A300 Construction Industry – Aggregate

A. This section has common equipment related to most Crusher/Screening Operations.

A301 Equipment Substitutions

A. Substitution of aggregate handling equipment is authorized provided the replacement equipment is functionally equivalent and has the same or lower process capacity as the piece of equipment it is replacing in the most recent permit. The replacement equipment shall comply with the opacity requirements in this permit.

B. The Department shall be notified within fifteen (15) days of equipment substitutions using the Equipment Substitution Form provided by the Department and available online.

C. Chino Mine Screening Production Limits, (Unit CH SCRN)

Requirement: The process rate of the Chino Screening Plant shall not exceed 1000 tons per hour and a monthly-rolling 12-month total of 1,404,000 tons per year. This production rate and configuration were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor: (1) Daily tons of material processed; (2) Daily hours of operation; (3) Using the information above, during the first 12 months of monitoring, calculate a monthly running total of production, and after the first 12 months of monitoring a monthly rolling 12 month total of production and monitor the tons per year emission rates to ensure compliance with the allowable TSP and PM_{10} emission rates shown in Table 106.A for the Unit CH SCRN.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

D. Generator limits for Chino Screening Operation (Unit CH SCRN ENG)

Requirement: The generator pound per hour NOx, CO and SO_2 emissions shall not exceed those shown in Table 106.A. The total hours of operation shall not exceed 7,000 hours per year. The hourly emission rate limit and hours of operation were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall obtain the engine emission specifications provided by the engine manufacturer to calculate the individual emission rates in pounds per hour for NOx, CO and SO_2 to ensure that the emissions limits are not exceeded. The Permittee shall monitor the daily operating hours of the engine used to provide power to the screening operation. During the first 12 months of monitoring, the permittee shall calculate a monthly running total of engine operating hours. After the first 12 months of monitoring the permittee shall calculate a monthly-rolling 12-month total of engine operating hours.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

E. 40 CFR 60, Subpart IIII (Units CH SCRN ENG, CB SCRN ENG)

Requirement: The units are subject to 40 CFR 60, Subparts A and IIII and shall comply with the notification requirements in Subpart A and the specific requirements of Subpart IIII.
Monitoring: The Permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4211.
Recordkeeping: The Permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214.
Reporting: The Permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart IIII, including but not limited to 60.4214.

A302 Screening Operations for Cobre Mine

A. Cobre Screening Production Limits (Unit CB SCRN)

Requirement: The process rate of a Cobre Mine screening plant, whether it is a contractor-owned plant or a Chino-owned plant, shall not exceed 450 tons per hour or 1,346,800 tons per year and shall only operate in daylight hours. This production rate and configuration were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall monitor: (1) Daily tons of material processed; (2) Daily hours of operation; (3) Daily water application to meet emission limits; (4) The plant layout/configuration showing the number of material drops; (5) Using the information above, calculate and monitor the tons per year emission rates to ensure compliance with the allowable TSP and PM_{10} emission rates shown in Table 106.A.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

B. Generator limits for Screening Plant (CB SCRN ENG)

Requirement: The generator pound per hour NOx, CO and SO_2 emissions shall not exceed those shown in Table 106.A. The total hours of operation shall not exceed 4,380 hours per year. The hourly emission rate limit and hours of operation were specified in the permit application and used as the basis for the Department's modeling analysis to determine compliance with the applicable ambient air quality standards.
Monitoring: The Permittee shall obtain the engine emission specifications provided by the engine manufacturer to calculate the individual emission rates in pounds per hour for NOx, CO and SO_2 to ensure that the emissions limits are not exceeded. The Permittee shall monitor the daily operating hours of the engine used to provide power to the screening operation.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

A303 NSPS Subpart OOO Affected Equipment

A. The owner or operator of a 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671) shall meet the following fugitive emission limits (40 CFR 60, Subpart OOO, Table 3) for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.

(1) 10% opacity for affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.

(2) 7% opacity for affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008.

B. The owner or operator of a 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671) shall meet the following fugitive emissions limit (40 CFR 60, Subpart OOO, Table 3) for crushers at which a capture system is not used.

(1) 15% opacity for affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.

(2) 12% opacity for affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008.

C. The Permittee shall conduct an initial compliance test of each 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671), in accordance with the requirements of 40 CFR §§60.672 & 675 and Condition B111.

D. The Permittee shall comply with the applicable monitoring requirements of a 40 CFR 60 Subpart OOO affected facility (40 CFR 60.670 & 671) as required by 40 CFR §60.674.

A304 Non-NSPS Affected Equipment

A. For equipment not subject to any NSPS requirement and their emission calculation relied upon emission factors using controls, particulate emissions from ***non-NSPS*** affected transfer points, belt conveyors, and screens, shall not exhibit greater than 10% opacity. Particulate emissions from ***non-NSPS*** crushers shall not exhibit greater than 15% opacity.

B. Ongoing material handling opacity testing

Requirement: The Permittee shall demonstrate ongoing compliance with the opacity limits of this permit.
Monitoring: The Permittee shall perform a 6-minute opacity reading for each crusher, screen and stacker conveyor (material drop to storage pile) at least once per calendar month in which the facility operates. If requested by the Department in writing, the Permittee shall perform additional monthly testing on each transfer conveyor as required above. The test will be used to demonstrate compliance with the opacity limitations in this permit. The test shall be done at the normal operational load of the facility. Compliance with this condition shall be determined by opacity test observations conducted in accordance with Reference Method 9 in 40 CFR Part 60, Appendix A. Method 22 in 40 CFR Part 60, Appendix A may be used in place of Method 9 if the applicant can demonstrate no visible emissions during the 6-minute visual emissions test. If visible emissions are observed, then the Permittee shall use Method 9.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109.
Reporting: The Permittee shall report in accordance with Section B110.

C. Daily inspection of water sprays

Requirement: If water sprays are installed, the Permittee shall inspect the water sprays to insure that they are functioning properly (including, but not limited to spray bars are pointing in the right places, are not blocked or plugged, and are atomizing the water properly).
Monitoring: Within two hours of startup of each calendar day, the Permittee shall inspect the water sprays to insure they are controlling fugitive dust emissions.
Recordkeeping: A daily record shall be made of the inspection and any maintenance activity that resulted from the inspection. At a minimum, the record shall include the date, time, name of individual conducting the inspection, a description of any malfunction, and any corrective actions taken. The record shall be attached to a description of what shall be inspected, to ensure the inspector understands his or her responsibilities.
Reporting: The Permittee shall report in accordance with Section B110.

POWER GENERATION INDUSTRY

A400 Power Generation Industry

A. This section has common equipment related to most Electric Service Operations (SIC-4911).

A401 Turbines and HRSG

A. Maintenance and Repair (Unit F-2-1-1.4 (turbine) and F-2-1-1.5 (HRSG))

Requirement: To comply with the allowable emission limits, the units shall be maintained to minimum manufacturer's or Permittee's recommended maintenance schedule to ensure good combustion practices.
Monitoring: Maintenance and repair shall meet the minimum manufacturer's or Permittee's recommended maintenance schedule. Maintenance and repair activities that involve adjustment, replacement, or repair of functional components with the potential to affect operation of an emission unit shall be documented as they occur for the following events. (a) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period. (b) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.
Recordkeeping: The Permittee shall record the maintenance and repair activities and the record shall include identification of emission units and the work involved.
Reporting: The Permittee shall report in accordance with Section B110.

B. Periodic Emissions Tests (Unit F-2-1-1.4 (turbine) and F-2-1-1.5 (HRSG))

Requirement: The Permittee shall comply with the allowable emission limits.
Monitoring: The Permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NOx and CO, emissions tests shall be carried out as described below. Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits. (a) The test period shall be annually, period starting on January 1. (b) The first test shall occur within the first monitoring period occurring after permit issuance. (c) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period. (d) Follow the General Testing Procedures of Section B111. (e) The power plant can operate in simple cycle mode (turbine only exhaust stack) or in combined cycle mode (turbine + HRSG exhaust stack). Testing will be conducted on the

exhaust stack for which the power plant is configured at the time of testing. It is not necessary to change the power plant configuration from simple cycle mode to combined cycle mode or from combined cycle mode to simple cycle mode merely to conduct the testing. If the power plant configuration is changed for operational reasons since the last testing was conducted, testing on the new configuration shall be conducted within 90 days of changing the configuration.
Recordkeeping: The Permittee shall maintain records in accordance with Section B109. The Permittee shall also record the results of the periodic emissions tests, including the turbine's and HRSG's fuel flow rate and turbine's power output at the time of the test, and the type of fuel fired (natural gas, field gas, etc.). If a combustion analyzer is used to measure NOx, CO, and/or excess air in the exhaust gas, records shall be kept of the make and model of the instrument and instrument calibration data. If an ORSAT apparatus or other gas absorption analyzer is used, the Permittee shall record all calibration results. The Permittee shall also keep records of all raw data used to determine exhaust gas flow and of all calculations used to determine flow rates and mass emissions rates.
Reporting: The Permittee shall report in accordance with Section B110.

C. 40 CFR 60, Subpart GG (Unit F-2-1-1.4)

Requirement: The unit is subject to 40 CFR 60, Subpart GG and the Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart GG.
Monitoring: The Permittee shall comply with the applicable monitoring and testing requirements of 40 CFR 60.334 and 60.335. To comply with the fuel monitoring requirements of NSPS Subpart GG, the Permittee may use the custom fuel monitoring schedule contained in Attachment A. However, if the conditions of the custom schedule cannot be met, the Permittee shall revert to the fuel monitoring requirements of NSPS Subpart GG, 60.334(h).
Recordkeeping: The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.334 and 40 CFR 60.7.
Reporting: The Permittee shall comply with the reporting requirements of 40 CFR 60.7.

D. 40 CFR 60, Subpart Dc (Unit F-2-1-1.5)

Requirement: The unit is subject to 40 CFR 60, Subpart Dc and the Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart Dc.
Monitoring: The Permittee shall comply with the applicable monitoring requirements of 40 CFR 60.48c.
Recordkeeping: The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.48c and 40 CFR 60.7.
Reporting: The Permittee shall comply with the reporting requirements of 40 CFR 60.7.

SOLID WASTE DISPOSAL (LANDFILLS) INDUSTRY

A500 Solid Waste Disposal (Landfills) Industry– Not Required

MINING INDUSTRY

A600 Mining Operations Introduction

A. This section has common equipment related to most mining Operations.

A601 Ivanhoe Concentrator

A. Units PC-01

Requirement: At the Ivanhoe Concentrator, the production rate of the concentrating circuit shall not exceed an annual average of 60,000 tons per day. The maximum single hourly production rate through the concentrator circuit shall not exceed 3,300 tons per hour. The maximum daily throughput for the crusher system shall not exceed 80,640 tons per day.
Monitoring: The Permittee shall monitor the process rate of the Primary Crusher and Ivanhoe Concentrator. The information monitored shall include the unit identification number, date, and the process rates.
Recordkeeping: The Permittee shall maintain the ability to produce production records upon request. The records can be computer generated or hand written summaries supported by the data. When requested, the Permittee shall produce a record that includes the date, time, and: • the daily (24-hour calendar day) production rate for the Primary Crusher, • the hourly production rate for the Ivanhoe Concentrator and • the daily-rolling 365-day average production rate for Ivanhoe Concentrator.
Reporting: The Permittee shall maintain the ability to generate a report from the information collected. This report shall be generated upon request. The Permittee shall report in accordance with Section B110.

B. 40CFR60, Subpart LL Compliance (Units PC-01, CV-01B, CTS-01, CV-01C, SAG-F1, IC-01)

Requirement: 40 CFR 60, Subpart LL applies only to the specified Ivanhoe Concentrator affected facilities listed above. For an affected facility using a wet scrubber, the scrubber shall be equipped with pressure gauges to measure pressure drop across the control device. Wet scrubbing systems shall be equipped with a continuous monitoring device to measure the scrubbing liquid flow rate. Pressure gauges and monitoring devices shall be installed, calibrated, maintained, and operated in accordance with the manufacturer specifications. Compliance with this will be based on Department inspections of the facility to verify that instruments have been installed and of the records as set forth in 40CFR60, Subpart LL.

Monitoring: The Permittee shall comply with the applicable monitoring requirements of 40 CFR 60, Subpart LL.
Recordkeeping: The Permittee shall comply with the applicable notification and record keeping requirements as set forth in 40CFR60, Subpart LL shown here: a) The Owner/Operator shall submit a written report of the results of the performance tests as specified in 40 CFR §60.8(a). b) The Owner/Operator shall record the measurements of change in pressure of the gas stream across the scrubber and scrubbing fluid flow rate weekly. The Owner/Operator shall submit semiannual reports of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ±30 % from the average obtained from the most recent performance test. These reports shall be postmarked within 30 days following the end of June and December.
Reporting: The Permittee shall submit reports as required by 40CFR60, Subpart A and/or Subpart LL.

A602 Chino Mine Blasting Operations

A. Chino Mine Blasting (Unit CM BLST)

Requirement: The Permittee shall not exceed the consumption of ammonium nitrate blasting agents of fifty-two thousand (52,000) tons per year in the blasting operation and four hundred thousand (400,000) pounds per day. These values and the emission factors for blasting agents are from "A Technique for Measuring Toxic Gases Produced by Blasting Agents", from the Proceedings of the 23rd Annual Conference on Explosives and Blasting Technique, (Las Vegas, NV, Feb. 2-5, 1997) and AP-42, Chapter 13.3, Explosives Detonation (February 1980, reformatted January 1995), Table 13.3-1, and are the basis for emission calculations for mine fugitives (blasting). Blasting shall only occur during daylight hours as defined at C101.A.
Monitoring: Monitor the use of explosives to ensure the tons per year and pounds per day limits are not exceeded. To demonstrate compliance during, the first 12 months of monitoring, each month the permittee shall calculate the cumulative total consumption of ammonium nitrate blasting agents, and after the first 12 months of monitoring the Permittee shall calculate and sum the total consumption of tons of ammonium nitrate blasting agents on a monthly rolling 12 month basis.
Recordkeeping: The Permittee shall keep records of the amount of ammonium nitrate blasting agents used every month, and the resulting fugitive emissions. These records shall show the monthly total and monthly rolling total during the first 12 months of monitoring and the monthly rolling 12 month total after the first 12 months of monitoring.
Reporting: The Permittee shall report in accordance with Section B110.

A603 Gasoline Dispensing Facilities (GDF)

A. 40 CFR 63, Subpart CCCCCC, Gasoline Dispensing Facilities (Unit GDF)

Requirement: Each GDF is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage

tank. The GDFs are subject to 40 CFR 63, Subparts A and CCCCCC and each GDF has a monthly throughput less than 10,000 gallons of gasoline, therefore, the Permittee must comply with the requirements in §63.11116.
Monitoring: The Permittee shall comply with all applicable monitoring requirements in 40 CFR 63, Subpart A and Subpart CCCCCC, including but not limited to 63.11116.
Recordkeeping: The Permittee shall comply with all applicable recordkeeping requirements in 40 CFR 63, Subpart A and Subpart CCCCCC, including but not limited to 63.11116.
Reporting: The Permittee is not subject to the reporting or notification requirements in 40 CFR 63, Subpart A and Subpart CCCCCC.

A604 Combustion Equipment – Boilers, Engines

A. 40 CFR 63, Subpart ZZZZ (Units CB EGEN2 & CB EGEN3)

Requirement: These units are subject to 40 CFR 63, Subpart ZZZZ and the Permittee shall comply with all applicable requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.
Monitoring: The Permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.
Recordkeeping: The Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.
Reporting: The Permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.

A605 Solvent Extraction – Electro-winning (SX/EW) Plant

A. The source consists of ten covered mixer/settler tanks (Unit SXEW 10MST), six for extraction (surface area of 39,000 sqft ±10%) and four for stripping (surface area of 39,104 sqft ±10%), an open 900,000 gallon raffinate tank (Unit SXEW RT with a surface area of 5,024 sqft ±10%), an open 2 million gallon acid tankhouse (Unit SXEW SAT) and two water boilers (Units SXEW Boiler No.1 and 2).

B. The Department approves of the emissions estimates that were based on the study, BHP Copper - Quantification of Volatile Organic Compound Emissions From The Solution Extraction Process (BHP Method). The physical conditions of this facility must be similar to those described in the study. Specifically, the mixer/settler tanks shall be covered in order to minimize the velocity of air flow across the liquid surface of the tanks.

C. Units SXEW 10MST, SXEW RT, and SXEW SAT

Requirement: The Permittee shall use any combination of the following products: Acorga M5910, M5640, OR25, COGNIS LIX684N-LV, as the extraction reagent, and Penreco 170ES, Escaid 110, Escaid 115 as the organic diluent, or equivalents approved in accordance with Section B110.C(2).
Monitoring: The Permittee shall monitor the types of the diluent and extraction reagent used

and the dates any changes are made.
Recordkeeping: In accordance with Section B109 of this permit the operating logs and records of the following information shall be kept for each diluent and extraction reagents: a) The diluent and extraction reagent types used, Material Safety Data Sheets (MSDS), and the dates any changes are made between diluents and extraction reagents allowed by this permit. b) The composition, including but not limited to the molecular weight, HAP constituents, vapor pressure and diffusivity coefficient. c) The Permittee shall certify that no thresholds of New Mexico Toxic Air Pollutants (20.2.72.400 NMAC) are exceeded in the compounds.
Reporting: Reporting and product approval shall be in accordance with Section B110.C.
Compliance Testing: No compliance tests are required for the VOC and HAPS emissions at this facility. The Department accepts the validity of the BHP Method and its application to the estimation of emissions from this facility. Duplication of the physical conditions (covered mixer/settler tanks) and adjustment for the differences in the composition of diluent and extraction reagent is accepted in lieu of physical testing.

A606 Fugitive Dust

A. Fugitive Dust Control Plan (FDCP)

Requirement: The Permittee shall develop a Fugitive Dust Control Plan (FDCP) within 90-days of permit issuance for minimizing emissions from areas such as aggregate feeders, bins, bin scales, storage pile, overburden removal, disturbed earth, buildings, truck loading/unloading, active pits, or tailing impoundments (Units CBM TLNGS and CM TLNGS) that are not subject to 40 CFR 60, Subpart LL. For example: Sites of overburden removal and active pit areas shall be watered, dependent on existing wind speeds and soil moisture content, as necessary to minimize dust emissions. Or, stock piles shall be maintained with standard industry practices and procedures to minimize fugitive emissions to the atmosphere.
Monitoring: Once each calendar month, the Permittee shall inspect each area to ensure that fugitive dust is being minimized and determine if the FDCP plan needs updating.
Recordkeeping: Monthly, the Permittee shall make a record of each monthly inspection and revise the plan to address past shortcomings as well as future activities. If no changes are needed, then the Permittee shall make a record that the plan needs no changes. The Permittee shall make a record of any action taken to minimize emissions as a result of the FDCP or monthly inspections.
Reporting: The Permittee shall report in accordance with Section B110.

PART B GENERAL CONDITIONS

B100 Introduction

A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

B101 Legal

A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the Permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the Permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)

B. Any future physical changes, changes in the method of operation or changes in restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

D. The Permittee shall establish and maintain the property's Restricted Area, as identified in the most recent modeling plan for which the Permittee received Department approval. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)

E. Applications for permit revisions and modifications shall be submitted to:

Program Manager, Permits Section

New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

F. Pursuant to 20.2.72.210 NMAC, at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC)

B102 Authority

A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.

B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

A. The Department will assess an annual fee for this Facility. The regulation 20.2.75 NMAC set the fee amount at $1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the Permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)

B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

B104 Appeal Procedures

A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or Permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or Permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm. N2153
P.O. Box 5469
Santa Fe, New Mexico 87502

B105 Submittal of Reports and Certifications

A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us.

B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)

C. Regularly scheduled reports shall be submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, New Mexico 87507-3113

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c), unless specifically exempted in the applicable subpart.

B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart.

B107 Startup, Shutdown, and Maintenance Operations

A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the Permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (SSM work practice plan. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements

A. These requirements do not supersede or relax requirements of federal regulations.

B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.

C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the Permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the Permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the Permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.

(1) If the emission unit has operated for more than 25% of a monitoring period, then the Permittee shall conduct monitoring during that period.

(2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the Permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

(3) If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during any five-year period.

E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

F. When requested by the Department, the Permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.

G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

B109 General Recordkeeping Requirements

A. The Permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is:

(1) equipment identification (include make, model and serial number for all tested equipment and emission controls);

(2) date(s) and time(s) of sampling or measurements;

(3) date(s) analyses were performed;

(4) the qualified entity that performed the analyses;

(5) analytical or test methods used;

(6) results of analyses or tests; and

(7) operating conditions existing at the time of sampling or measurement.

B. Except as provided in the Specific Conditions, records shall be maintained on-site or at the permittee's local business office for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.

C. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):

(1) The Permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)

(2) If the facility has allowable SSM emission limits in this permit, the Permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

(3) If the facility has allowable malfunction emission limits in this permit, the Permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential

to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the Permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized limit.

B110 General Reporting Requirements
(20.2.72 NMAC Sections 210 and 212)

A. Records and reports shall be maintained on-site unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest company office.

B. The Permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):

(1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date;

(2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and

(3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.

C. The Permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):

(1) any change of operators or any equipment substitutions within fifteen (15) days of such change;

(2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.

D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data

shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

E. The Permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

B111 General Testing Requirements

A. Compliance Tests

(1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)

(2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

(3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.

(4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.

(5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.

(6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

(1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:

(a) Methods 1 through 4 for stack gas flowrate

(b) Method 5 for TSP

(c) Method 6C and 19 for SO_2

(d) Method 7E for NO_X (test results shall be expressed as nitrogen dioxide (NO_2) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO_2 is equivalent to 1.194 x 10-7 lb/SCF)

(e) Method 9 for opacity

(f) Method 10 for CO

(g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).

(h) Method 7E or 20 for Turbines per 60.335 or 60.4400

(i) Method 29 for Metals

(j) Method 201A for filterable PM_{10} and $PM_{2.5}$

(k) Method 202 for condensable PM

(l) Method 320 for organic Hazardous Air Pollutants (HAPs)

(m) Method 25A for VOC reduction efficiency

(2) Alternative test method(s) may be used if the Department approves the change

C. Portable Analyzer Requirements and Portable Analyzer Requirements

(1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

(2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

(3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.

(4) During emissions tests, pollutant, O_2 concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.

(5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

(1) The Permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.

(2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.

(3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.

(4) The Permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.

(5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.

(6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

(7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The Permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the Permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the Permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)

B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)

C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

B113 Permit Cancellation and Revocation

A. The Department may revoke this permit if the applicant or Permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.

B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)

C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

B114 Notification to Subsequent Owners

A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the Permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)

B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

B115 Asbestos Demolition

A. Before any asbestos demolition or renovation work, the Permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the Permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

B116 Short Term Engine Replacement

A. The following Alternative Operating Scenario (AOS) addresses engine breakdown or periodic maintenance and repair, which requires the use of a short term replacement engine. The following requirements do not apply to engines that are exempt per 20.2.72.202.B(3) NMAC. Changes to exempt engines must be reported in accordance with 20.2.72.202.B NMAC. A short term replacement engine may be substituted for any engine allowed by this permit for no more than 120 days in any rolling twelve month period per permitted engine. The compliance demonstrations required as part of this AOS are in addition to any other compliance demonstrations required by this permit.

(1) The Permittee may temporarily replace an existing engine that is subject to the emission limits set forth in this permit with another engine regardless of manufacturer, model, and horsepower without modifying this permit. The Permittee shall submit written notification to the Department within 15 days of the date of engine substitution according to condition B110.C(1).

(a) The potential emission rates of the replacement engine shall be determined using the replacement engine's manufacturer specifications and shall comply with the existing engine's permitted emission limits.

(b) The direction of the exhaust stack for the replacement engine shall be either vertical or the same direction as for the existing engine. The replacement engine's stack height and flow parameters shall be at least as

effective in the dispersion of air pollutants as the modeled stack height and flow parameters for the existing permitted engine. The following equation may be used to show that the replacement engine disperses pollutants as well as the existing engine. The value calculated for the replacement engine on the right side of the equation shall be equal to or greater than the value for the existing engine on the left side of the equation. The permitting page of the Air Quality Bureau website contains a spreadsheet that performs this calculation.

EXISTING ENGINE REPLACMENT ENGINE

$$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} <= \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$$

Where
g = gravitational constant = 32.2 ft/sec^2
h1 = existing stack height, feet
v1 = exhaust velocity, existing engine, feet per second
c = specific heat of exhaust, 0.28 BTU/lb-degree F
T1 = absolute temperature of exhaust, existing engine = degree F + 460
q1 = permitted allowable emission rate, existing engine, lbs/hour
h2 = replacement stack height, feet
v2 = exhaust velocity, replacement engine, feet per second
T2 = absolute temperature of exhaust, replacement engine = degree F + 460
q2 = manufacturer's potential emission rate, replacement engine, lbs/hour

The Permittee shall keep records showing that the replacement engine is at least as effective in the dispersion of air pollutants as the existing engine.

(c) Test measurement of NOx and CO emissions from the temporary replacement engine shall be performed in accordance with Section B111 with the exception of Condition B111A(3) and B111B for EPA Reference Methods Tests or SectionB111C for portable analyzer test measurements. Compliance test(s) shall be conducted within fifteen (15) days after the unit begins operation, and records of the results shall be kept according to section B109.B. This test shall be performed even if the engine is removed prior to 15 days on site.

i. These compliance tests are not required for an engine certified under 40CFR60, subparts IIII, or JJJJ, or 40CFR63, subpart ZZZZ if the Permittee demonstrates that one of these requirements causes such engine to comply with all emission limits of this permit. The Permittee shall submit this demonstration to the Department within 48 hours of placing the new unit into operation. This submittal

shall include documentation that the engine is certified, that the engine is within its useful life, as defined and specified in the applicable requirement, and shall include calculations showing that the applicable emissions standards result in compliance with the permit limits.

ii. These compliance tests are not required if a test was conducted by portable analyzer or by EPA Method test (including any required by 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) within the last 12 months. These previous tests are valid only if conducted at the same or lower elevation as the existing engine location prior to commencing operation as a temporary replacement. A copy of the test results shall be kept according to section B109.B.

(d) Compliance tests for NOx and CO shall be conducted if requested by the Department in writing to determine whether the replacement engine is in compliance with applicable regulations or permit conditions.

(e) Upon determining that emissions data developed according to B116.A.1(c) fail to indicate compliance with either the NOx or CO emission limits, the Permittee shall notify the Department within 48 hours. Also within that time, the Permittee shall implement one of the following corrective actions:

i. The engine shall be adjusted to reduce NOx and CO emissions and tested per B116.A.1(c) to demonstrate compliance with permit limits.

ii. The engine shall discontinue operation or be replaced with a different unit.

(2) Short term replacement engines, whether of the same manufacturer, model, and horsepower, or of a different manufacturer, model, or horsepower, are subject to all federal and state applicable requirements, regardless of whether they are set forth in this permit (including monitoring and recordkeeping), and shall be subject to any shield afforded by this permit.

(3) The Permittee shall maintain a contemporaneous record documenting the unit number, manufacturer, model number, horsepower, emission factors, emission test results, and serial number of any existing engine that is replaced, and the replacement engine. Additionally, the record shall document the replacement duration in days, and the beginning and end dates of the short term engine replacement.

(4) The Permittee shall maintain records of a regulatory applicability determination for each replacement engine (including 40CFR60, subparts IIII and JJJJ and

40CFR63, subpart ZZZZ) and shall comply with all associated regulatory requirements.

B. Additional requirements for replacement of engines at sources that are major as defined in regulation 20.2.74 NMAC, Permits – Prevention of Significant Deterioration, section 7.AF. For sources that are major under PSD, the total cumulative operating hours of the replacement engine shall be limited using the following procedure:

(1) Daily, the actual emissions from the replacement engine of each pollutant regulated by this permit for the existing engine shall be calculated and recorded.

(2) The sum of the total actual emissions since the commencement of operation of the replacement engine shall not exceed the significant emission rates in Table 2 of 20.2.74 NMAC, section 502 for the time that the replacement engine is located at the facility.

C. All records required by this section shall be kept according to section B109.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.

(1) Excess Emission Form (for reporting deviations and emergencies)

(2) Universal Stack Test Notification, Protocol and Report Form and Instructions

(3) SOP for Use of Portable Analyzers in Performance Tests

C101 Definitions

A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

B. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.

C. **"Fugitive Emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

D. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.

E. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)

F. **"Natural Gas Liquids"** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)

G. **"National Ambient air Quality Standards"** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.

H. **"Night"** is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at http://aa.usno.navy.mil/. Alternatively, these times can be obtained from a Farmer's Almanac or from http://www.almanac.com/rise/).

I. **"Night Operation** or **Operation at Night"** is operating a source of emissions at night.

J. **"NO2"** or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **"nitrogen dioxide,"** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NOx or NOx. (20.2.2 NMAC)

K. "**NOx**" see NO_2

L. **"Potential Emission Rate"** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.

M. "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.

N. **"Shutdown"**, for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

O. **"SSM"**, for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.

(1) **"Shutdown"**, for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.

(2) **"Startup"**, for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.

P. **"Startup"**, for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB	2-stroke lean burn
4SLB	4-stroke lean burn
4SRB	4-stroke rich burn
acfm	actual cubic feet per minute
AFR	air fuel ratio
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BTU	British Thermal Unit
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	continuous emissions monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulation
CI	compression ignition
CO	carbon monoxides
COMS	continuous opacity monitoring system
EIB	Environmental Improvement Board

EPA ..... United States Environmental Protection Agency
gr./100 cf ..... grains per one hundred cubic feet
gr./dscf ..... grains per dry standard cubic foot
GRI ..... Gas Research Institute
HAP ..... hazardous air pollutant
hp ..... horsepower
H_2S ..... hydrogen sulfide
IC ..... internal combustion
KW/hr ..... kilowatts per hour
lb/hr ..... pounds per hour
lb/MMBtu ..... pounds per million British Thermal Unit
MACT ..... Maximum Achievable Control Technology
MMcf/hr ..... million cubic feet per hour
MMscf ..... million standard cubic feet
N/A ..... not applicable
NAAQS ..... National Ambient Air Quality Standards
NESHAP ..... National Emission Standards for Hazardous Air Pollutants
NG ..... natural gas
NGL ..... natural gas liquids
NMAAQS ..... New Mexico Ambient Air Quality Standards
NMAC ..... New Mexico Administrative Code
NMED ..... New Mexico Environment Department
NMSA ..... New Mexico Statues Annotated
NOx ..... nitrogen oxides
NSCR ..... non-selective catalytic reduction
NSPS ..... New Source Performance Standard
NSR ..... New Source Review
PEM ..... parametric emissions monitoring
PM ..... particulate matter (equivalent to TSP, total suspended particulate)
PM_{10} ..... particulate matter 10 microns and less in diameter
$PM_{2.5}$ ..... particulate matter 2.5 microns and less in diameter
pph ..... pounds per hour
ppmv ..... parts per million by volume
PSD ..... Prevention of Significant Deterioration
RATA ..... Relative Accuracy Test Assessment
RICE ..... reciprocating internal combustion engine
rpm ..... revolutions per minute
scfm ..... standard cubic feet per minute
SI ..... spark ignition
SO_2 ..... sulfur dioxide
SSM ..... Startup Shutdown Maintenance (see SSM definition)
TAP ..... Toxic Air Pollutant
TBD ..... to be determined
THC ..... total hydrocarbons

TSP..... Total Suspended Particulates
tpy .....tons per year
ULSD .....ultra low sulfur diesel
USEPA..... United States Environmental Protection Agency
UTM.....Universal Transverse Mercator Coordinate system
UTMH.....Universal Transverse Mercator Horizontal
UTMV.....Universal Transverse Mercator Vertical
VHAP.....volatile hazardous air pollutant
VOC ..... volatile organic compounds